

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US2005/006006

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 H05K1/16 H05K3/46

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H05K H01P H01F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 739 193 A (WALPITA ET AL) 14 April 1998 (1998-04-14) column 6, line 37 - column 7, line 49	1-24
X	US 2004/000425 A1 (WHITE GEORGE E ET AL) 1 January 2004 (2004-01-01) cited in the application paragraphs '0023!', '0025!', '0040!; figure 6	1-24
X	US 2002/158305 A1 (DALMIA SIDHARTH ET AL) 31 October 2002 (2002-10-31) paragraphs '0043! - '0051!; figures 2,3	1-24
X	US 2004/034489 A1 (OGINO TATSUYA ET AL) 19 February 2004 (2004-02-19) paragraphs '0055! - '0060!; figures 7,17	1-24
	----- -/-	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

\*A\* document defining the general state of the art which is not considered to be of particular relevance

\*E\* earlier document but published on or after the international filing date

\*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

\*O\* document referring to an oral disclosure, use, exhibition or other means

\*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*G\* document member of the same patent family

Date of the actual completion of the international search

25 May 2005

Date of mailing of the international search report

07/06/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Batev, P

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US2005/006006

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2002/195270 A1 (OKUBORA AKIHIKO ET AL) 26 December 2002 (2002-12-26) paragraphs '0063! - '0086!; figures 8-23 -----	1-24
A	WO 01/95679 A (BLUETRONICS AB; GONG, SHAOFANG; NILSSON, JOHAN) 13 December 2001 (2001-12-13) the whole document -----	1-24

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US2005/006006

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5739193	A	14-04-1998	EP 0897582 A1 JP 2000510639 T WO 9742639 A1	24-02-1999 15-08-2000 13-11-1997
US 2004000425	A1	01-01-2004	WO 2004088731 A2 US 2004000968 A1 US 2004000701 A1	14-10-2004 01-01-2004 01-01-2004
US 2002158305	A1	31-10-2002	NONE	
US 2004034489	A1	19-02-2004	JP 2003115557 A CN 1476633 A WO 03032386 A1	18-04-2003 18-02-2004 17-04-2003
US 2002195270	A1	26-12-2002	JP 2002094247 A EP 1189345 A2 TW 519801 B US 2002075106 A1	29-03-2002 20-03-2002 01-02-2003 20-06-2002
WO 0195679	A	13-12-2001	SE 520151 C2 AU 5689501 A SE 0001943 A WO 0195679 A1	03-06-2003 17-12-2001 08-12-2001 13-12-2001